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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,488	12/26/2001	Rudolf Bitzinger	112740-275	7114
29177	7590	10/05/2007		
BELL, BOYD & LLOYD, LLP P.O. BOX 1135 CHICAGO, IL 60690			EXAMINER SOL. ANTHONY M	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No.		Applicant(s)	
	09/936,488		BITZINGER ET AL.	
	Examiner		Art Unit	
	Anthony Sol		2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17, 19-25 and 27-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17, 19-25 and 27-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- Applicant's Amendment filed 7/25/2007 is acknowledged.
- Claim 17 has been amended.
- Claims 17, 19-25 and 27-32 remain pending.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 17, 19-25, 27, 31 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,091,709 ("Harrison").

Regarding claim 17,

Harrison discloses requesting use of the service by a controller that centrally controls transmissions over the network (see col. 2, lines 51-62, *QoS Manager*; also see col. 2, lines 51-62, *The QoS Manager acts in response to requests ...to assign incoming traffic to prioritized service levels*). Note that any of the routers 3 of fig. 1 can be a controller that centrally controls transmissions over their respective network, such as a local area network (LAN).

Harrison further discloses variably allocating Quality of Service during call

admission using the controller in response to the requests, wherein the Quality of Service is dependant upon at least one of (1) the service and (2) the requested use of the service, and wherein a high quality of service is awarded when a predetermined transmission capacity in the network exists, and a low quality of service is awarded otherwise (see col. 2, line 63 to col. 3, line 7, *If priority queues can accept additional traffic because they are being under-utilized, traffic in lower priority queues is transferred to the under-utilized queues. This effective promotion of lower priority traffic is maintained until all queues are operating just below their thresholds of congestion*).

3. Regarding claim 19,

Harrison discloses a router offering priority services required for handling of real-time voice (see Abstract, lines 1-4).

4. Regarding claim 20,

Harrison discloses that the mechanism is designed specifically to ensure with a high degree of certainty that prioritized data will be delivered with isochronous timing; the degree of certainty increasing progressively for progressively higher levels of priority (col. 2, lines 39-46).

5. Regarding claim 21,

Harrison discloses that the packet forwarding element is responsible for

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transferring traffic from the prioritized forwarding queues out to the network (col. 3, lines 13-15).

6. Regarding claim 22,

Harrison discloses that their invention can be used with RSVP enabled routers, which requires sending a request for priority service (claimed signaling)(col. 1, lines 24-67, particularly lines 64-65; *Our invention is directed to solving this problem* (in RSVP)).

7. Regarding claims 23 and 31,

Harrison discloses that router 3 (claimed edge router) of fig. 1 can be used to send packets in TCP/IP format used on the internet (col. 6, lines 48-50).

8. Regarding claim 24,

Harrison discloses that their invention can be used with routers deploying RSVP, a standard defined in RFC 2205, which requires Resv messages (claimed acknowledgement) (col. 1, lines 24-67, particularly lines 64-65; *Our invention is directed to solving this problem* (in RSVP)) that must ultimately be delivered to the sender host (see RFC 2205, section 1.2).

9. Regarding claim 25,

Harrison discloses that their invention can be used with RSVP enabled routers,

which requires sending a request for priority service (claimed signaling packets)(col. 1, lines 24-67, particularly lines 64-65; *Our invention is directed to solving this problem (in RSVP))*).

10. Regarding claim 27,

Harrison discloses that the packet prioritizing element steers incoming packets to forwarding queues appropriate to their reserved classes of service (col. 2, lines 63-66).

11. Regarding claim 32,

Harrison discloses a QoS manager (claimed gatekeeper) for handling voice data (VoIP)(Abstract). H.323 is used in VoIP.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison in view of U.S. Patent No. 6,643,258 ("Ise").

Regarding claim 28,

Harrison does not disclose providing a Quality of Service tag in the packets.

Ise discloses carrying out the priority control processing according to only the tag indicating the priority level in the packet, without carrying out the RSVP message processing (col. 26, lines 8-17).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention was made to modify the Quality of Service management of Harrison to include service tags in packets as taught by Ise. One skilled in the art would have been motivated to make the combination so that core nodes 101-103 of the network 305 in fig. 22 would have processing loads be reduced (Ise, col. 26, lines 8-17, especially lines 13-14).

14. Regarding claim 29,

Harrison does not disclose transmitting packet streams with high and low quality service tags.

Ise discloses that the node other than the edge node does not carry out the packet priority control that accounts for the flow, but carries out only the priority control according to the tag for indicating the priority level of the packet (col. 24, lines 40-44)

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention was made to modify the Quality of Service management of Harrison to include service tags in packets as taught by Ise. One skilled in the art would have been motivated to make the combination so that core nodes 101-103 of the network 305 in fig. 22 would have processing loads be reduced (Ise, col. 26, lines 8-17, especially lines 13-14).

15. Regarding claim 30,

Harrison discloses producing the QoS on the basis of priorities, the high QoS being high priority and the low QoS being low priority (col. 2, lines 34-46, *Our invention is a QoS control mechanism... that enables network service providers to offer priority classes of service*).

Harrison does not disclose that the QoS tag is a priority tag.

Ise discloses that the node other than the edge node does not carry out the packet priority control that accounts for the flow, but carries out only the priority control according to the tag for indicating the priority level of the packet (col. 24, lines 40-44)

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention was made to modify the Quality of Service management of Harrison to include service tags in packets as taught by Ise. One skilled in the art would have been motivated to make the combination so that core nodes 101-103 of the network 305 in fig. 22 would have processing loads be reduced (Ise, col. 26, lines 8-17, especially lines 13-14).

Response to Arguments

Applicant's arguments filed 7/25/2007 have been fully considered but they are not persuasive.

- The Applicant argues, regarding the independent claim 17, beginning on page 5 of the Remarks that Harrison's QoS Manager is not a central function that acts on the network level.
- The Examiner respectfully disagrees. As noted in the rejection to claim 17 above that any of the routers 3 of fig. 1 can be a controller that centrally controls transmissions over their respective network, such as a local area network (LAN). It is well-known that routers act as gatekeepers within their domain, such as the case in the LAN. As such, the QoS Manager is a central function that acts on the LAN level, i.e., *on the network level*, as required by claim 17.
- The Applicant further argues that the use of the word "service" in Harrison is different than it's use in the instant application. In support of the argument, the Applicant contends that the Applicant's claims refer to "services" that do not have a pre-assigned QoS and that the controller variably allocates a (once decided) fixed level of QoS, dependent upon things such as the transmission capacity in the network at the time of the request. Applicant contends that Harrison, in contrast, teaches that an *application* determines that it needs a class of service at a particular priority level.

- In response to Applicant's argument that the references fail to show certain features of Applicant's invention, it is noted that the features upon which Applicant relies (i.e., no pre-assigned QoS) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As for the contention that Harrison teaches that an "application...determines that it needs a class of service...", the portion of Harrison (col. 7, lines 15-26) as cited by the Applicant in the Remarks is referring to a prior art as described by Harrison. In other words, Harrison is not describing his invention. Evidence of this is in col. 7, lines 56-58, where Harrison states, "A difficulty with such reservation schemes in prior systems was that the router generally had no way to know if it could afford to accept another reservation." Thus, Harrison teaches allocating variable Quality of Service dependent upon the service (col. 6, lines 31-34, *When a state of approaching congestion is detected in a queue, traffic is demoted from the respective queue to lower priority queues in order to relieve the congestion in the respective queue*).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Sol whose telephone number is (571) 272-5949. The examiner can normally be reached on M-F 7:30am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


10/1/07
WING CHAN
SUPERVISORY PATENT EXAMINER